



A Sierra Monitor Company

FS-B-OPC-01 Start-up Guide

APPLICABILITY & EFFECTIVITY

Description

FS-B-OPC Series FieldServer

The instructions are effective for the above as of February 2009

Kernel Version:	5.12
Document Revision:	5

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1 PRE-INSTALLATION CHECK LIST

1.1 Supplied equipment

FS-B-OPC-01 Series FieldServer

- loaded with Modbus RTU driver, SMT Ethernet driver, FST OPC Server Configurator and any other drivers ordered.¹

USB Flash Drive loaded with:

- FS-B-OPC-01 Series Start-up Guide
- FieldServer Configuration Manual
- FieldServer Utilities Manual
- Driver Manual(s) specific to all Drivers ordered with the FieldServer.
- Support Utilities (for the following platforms only):
 - Windows XP
 - Windows 2000
 - Windows NT
 - Windows 98
- Any additional folders related to special files configured for a specific FieldServer.
- Additional components as required -. See Driver Manual Supplement for details



Accessories:

- 6 ft Serial RS-232 connection pigtail (Part Number FS-8917-10)
- 7-ft Cat5 cable with RJ45 connectors at both ends (Part Number FS-8915-10)
- Power Supply

1.2 Mounting

The FS-B-OPC-01 Series FieldServer is supplied with an accessory bag which allows selection of adhesive feet (for standing on a shelf).

1.3 Wiring

- Select an external power supply certified for safety, for the correct destination country and an output rating, which is considered a NEC Class 2 circuit or is a SELV Limited power source with the following ratings:
 - 12-14 VDC, 5.0-4.28A;
- The operating environment for the product is 0 to 60°C (32 to 140°F).

¹ Note that a default configuration file has already been loaded onto the FieldServer. Check the Driver Manual and the FieldServer Configuration Manual for further information on this file.

2 PRODUCT DESCRIPTION

2.1 Dimensions

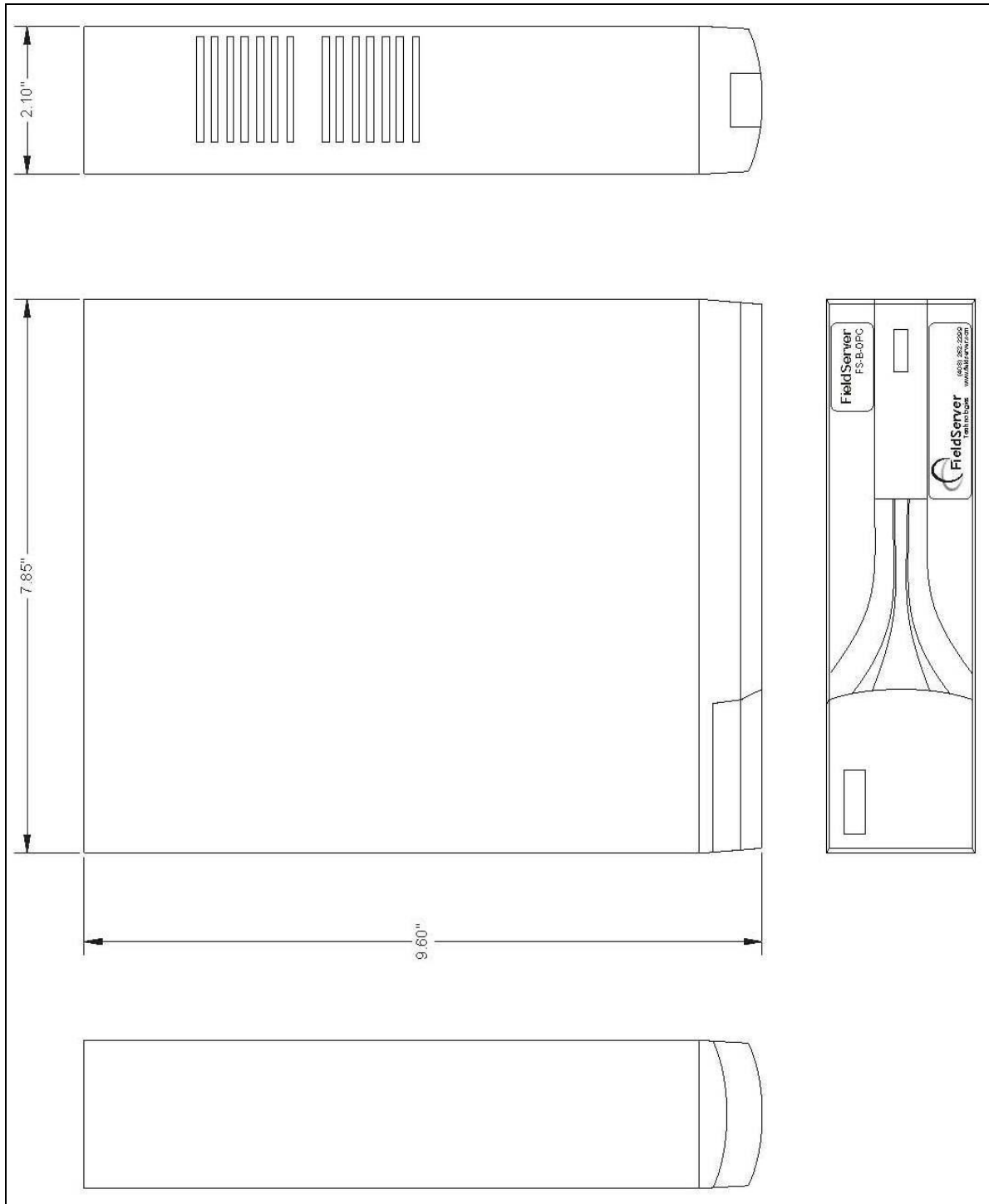


Figure 2-1: Diagram of FS-B-OPC-01 Showing External Dimensions

2.2 Specifications

Power requirements (power supply is external)	
FS-B-OPC-01 power supply P/N PWR-ACDC-12v-5A-60W Input voltage: 100-240Vac, 60W (max); Output voltage / current: 12Vdc @ 5.0A	
Physical Dimensions(excluding the external power supply)	
(WxDxH):	7.70 x 9.50 x 2.10 inches (19.56 x 24.13 x 5.33 cm)
Weight:	2.4 lbs. (1.09 Kg)
Available Ports	
1 x DB9 RS-232 serial port 1 x RJ45 10-BaseT Ethernet connector	
Environment:	
Operating Temperature:	0 – 60°C (32 – 140°F)
Humidity:	10 - 90% RH (non-condensing)
(Specifications subject to change without notice)	

3 CONNECTION TO THE DEVICE

The 12VDC power supply received with the unit needs to be plugged into a power source and then connected to the back of the FieldServer. Ensure that the power supply used complies with the specifications provided in Section 2.2.

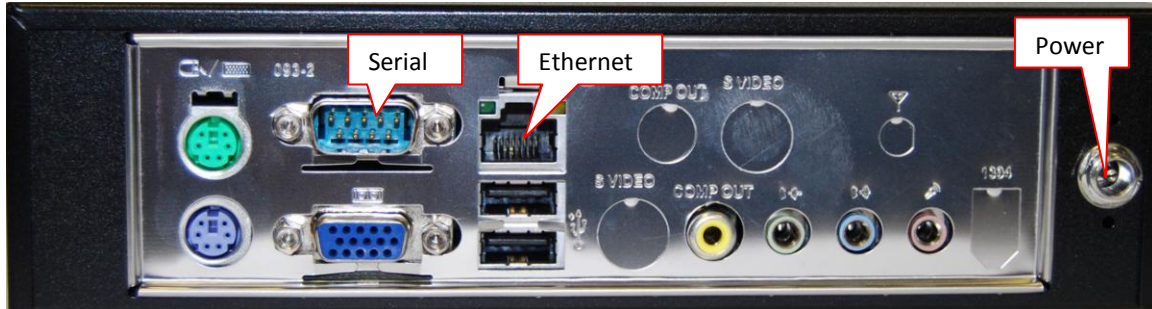
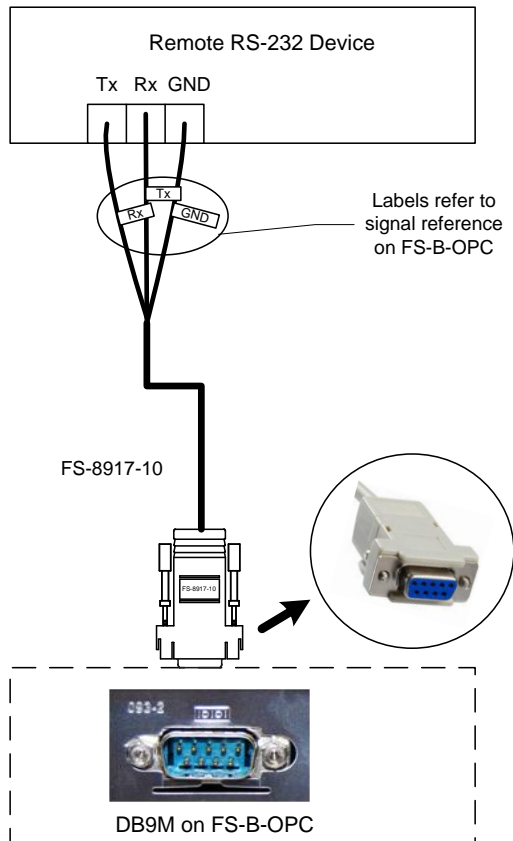


Figure 3-1: View of back of FS-B-OPC-01 showing Connection Ports

3.1 RS-232 connection

The FS-B-OPC-01 Series FieldServer is shipped with the RS-232 port activated.

Connect the FS-8917-10 cable (supplied) between the RS-232 port on the OPC FieldServer and the device as shown in the connection diagram. Note that the cable labels refer to the Tx and Rx signals on the FS-B-OPC and must be connected to the opposite signal on the remote device.



3.1.1 Connector Pinouts

Wire Color	FS-OPC		Remote Device	
	Signal	Pin #	Signal	Pin #
Green	Tx	3	Rx	8
Red	Rx	2	Tx	1
Black	GND	5	GND	4

Figure 3-2: FS-B-OPC Serial RS-232 Connection

3.2 Ethernet Connection

If connecting to a hub/switch use the provided Cat5 UTP Ethernet cable to connect the FieldServer to the hub. If connecting directly to the device, an Ethernet Crossover cable is required (not provided).

Note that the front USB ports and Compact Flash port are not activated.

4 OPERATION

Read this Start-up Guide in conjunction with the Configuration Manual, the Driver Manual(s) and the Utilities manual.

4.1 Connect and Power the FieldServer.

- Connect the power adapter to a 100 to 240vAC power supply. Ensure that the power supply used complies with the specifications provided in Section 2.2



Figure 4-1: View of front of FS-B-OPC-01 Showing Power LED and power button

- Press the Power Button on the front of the FS-B-OPC-01.
- Wait approximately 3-5 minutes for unit to operate.

4.2 Connect all wiring to unit

- Connect a standard CAT-5 Ethernet cable to the Ethernet port of the FS-B-OPC-01.
- Make appropriate RS232 wiring connections to the RS-232 port of the FS-B-OPC-01. Refer to Section 3 for more information.

4.3 Set the IP Address

- If the FieldServer was not ordered with a Custom Configuration, the IP address is set to automatically update from any local DHCP server.
- If no IP address was ordered, then a standard PC monitor, Keyboard, and Mouse must be connected to the FS-B-OPC-01 and the IP address set for a normal PC.
- Once the IP address is found or assigned, the configuration of the FST OPC Server Configuration Utility must be changed to match that IP address. Please reference the FS-8707-06 manual for more instruction.

4.4 Change the Configuration File to Meet the Application

- The configuration of the FieldServer is provided to the FieldServer's operating system via a comma-delimited file called "CONFIG.CSV" which can be accessed from the Start|Programs|FieldServerTechnologies|Configuration File folder.
- If ordered with the FieldServer, the custom configuration is installed; (Reference documentation FS-8790-XX).

- If a custom configuration is not purchased, a template config.csv is loaded on the FieldServer to facilitate user configuration of the FieldServer.
- Refer to the Configuration Manual in conjunction with the Driver supplements for information on configuring the FieldServer. Note: FieldServer Technologies offers training on this topic as well as a configuration service to complete this portion of the work. See www.fieldserver.com for specific details.

4.5 Run the FieldServer PC Bridge Utility

- If a Custom Configuration was ordered, this software will run automatically and this step can be skipped
- Once the config.csv file is set-up, double click on the FieldServer PC Bridge icon on the desktop to run the FieldServer software.

4.6 Configure the FST OPC Server Configurator to meet the Application

- If a Custom Configuration was ordered this step can be skipped
- If a Custom Configuration was not ordered, please follow the instructions supplied in the FS-8707-06 driver manual to configure the OPC Server to connect to the correct Data Arrays.
- The OPC Configurator is installed in c:\program files\FieldServer\FST., there is a shortcut on the desktop and it can be found in the start menu under Start|Programs|FST OPC Server for FieldServers.

4.7 Test and commission the FieldServer

- Connect the FieldServer to the third party device(s), and test the application.
- It may be necessary to connect a standard PC monitor, PC Keyboard and PC Mouse to perform any diagnostics or configuration
- If necessary, refer to the Troubleshooting manual which can be found in the FieldServer utilities directory under Documentation.
- Before contacting FieldServer technical support, send your config.csv file, and the *.fst file from your FST OPC Configurator to support@fieldserver.com. In the email, also provide a detailed description of the problem(s) occurring on the system.
- Application notes and other resources are available on the web at www.fieldserver.com

Appendix A. Limited Warranty

FieldServer Technologies warrants its products to be free from defects in workmanship or material under normal use and service for two years after date of shipment. FieldServer Technologies will repair or replace without charge any equipment found to be defective during the warranty period. Final determination of the nature and responsibility for defective or damaged equipment will be made by FieldServer Technologies personnel.

All warranties hereunder are contingent upon proper use in the application for which the product was intended and do not cover products which have been modified or repaired without FieldServer Technologies approval or which have been subjected to accident, improper maintenance, installation or application, or on which original identification marks have been removed or altered. This Limited Warranty also will not apply to interconnecting cables or wires, consumables or to any damage resulting from battery leakage.

In all cases FieldServer Technology's responsibility and liability under this warranty shall be limited to the cost of the equipment. The purchaser must obtain shipping instructions for the prepaid return of any item under this warranty provision and compliance with such instruction shall be a condition of this warranty.

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